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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary

Application No.

09/630,971

Applicant(s)

PASKINS, ADRIAN CHARLES

Examiner

JAMES SHELEHEDA

Art Unit

2623

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 July 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16, 24, 25, 27 and 30-32 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-16, 24, 25, 27 and 30-32 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/C)
- 4) ☐ Interview Summary (PTO-413)
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____
- Paper No(s)/Mail Date _____

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 07/28/08 has been entered.

Response to Arguments

2. Applicant's arguments with respect to claims 1-16, 24, 25, 27 and 32 have been considered but are moot in view of the new ground(s) of rejection.

3. Applicant's arguments with respect to claims 30 and 31 have been fully considered but they are not persuasive.

On page 11, applicant's argues that modifying Klosterman to include transmitting video/audio data in non-real time, as taught by Marshall, would change the principle of operation of Klosterman.

In response, it is first noted that Marshall was relied upon to disclose storing preview trailers and not transmitting video in non-realtime, as Picco was relied upon for this particular feature.

Klosterman discloses two methods of providing preview trailers, each with a corresponding tradeoff. The first method utilizes more bandwidth to provide trailers to the user with little delay. The second utilizes less bandwidth, but would provide a perceptible delay to the user before their selected preview is available (column 10, lines 32-57).

Marshall discloses a system for providing preview trailers to the viewer wherein the trailers are received and stored at the receiver (column 1, lines 48-52 and column 2, lines 54-61) to be available on demand as the user desires (column 1, lines 16-22). Thus, in combination with Klosterman, the user would be able to access and display the desired trailer with no delay, while utilizing less bandwidth. As the trailers would be stored as they are received, they would be available for viewing to the user without the higher bandwidth requirements of repeating the preview transmission more frequently.

Picco was then relied upon to disclose transmitting video/audio content in non-real time (Fig. 6; column 8, lines 29-36 and column 9, lines 41-51). This provides a more efficient use of available bandwidth, as content which is being stored and not immediately displayed may be downloaded slowly using excess bandwidth as it becomes available (column 9, lines 10-25).

Therefore, applicant's arguments are not convincing.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. Claim 30 is rejected under 35 U.S.C. 103(a) as being unpatentable over Klosterman (6,453,471) (of record) in view of Marshall et al. (Marshall) (6,419,137) (of record), Picco et al. (Picco) (6,029,045) (of record).

As to claim 30, Klosterman discloses a system (Fig. 2) for providing a plurality of sets of broadcast data service data (preview trailers; column 2, lines 56-65) transmitted together with broadcast digital television data as part of a broadcast signal (column 2, line 66-column 3, line 8) comprising:

a processor (100) configured to extract the plurality of sets of the broadcast data service data available from a broadcast carousel included in the broadcast signal (column 10, lines 20-48);

the broadcast data service data defining a plurality of audio/video data sets (audio/video data making up the preview trailers; column 10, lines 19-30), the digital audio/video data sets including television clips (column 1, lines 61-67);

a display configured to provide a list of a plurality of sets of the digital audio/video data sets (see Fig 1 and 8; column 10, lines 11-31); and

a controller responsive to a user initiated selection signal provided by an end user (user selection from the guide; column 10, lines 11-31) to cause the output of a user selected one of the plurality of digital audio/video data sets (column 10, lines 11-56) selected from the list (column 10, lines 11-31) simultaneously with continued receipt of the broadcast digital television data (wherein the broadcast television signals

continues to be broadcast and received by the system; see Fig. 9-10, column 10, lines 40-56),

the selection signal being provided at any time during receipt of the broadcast digital television data (wherein a television guide may be opened at any time; column 10, lines 11-31 and column 2, lines 51-65) and independently of the broadcast digital television data (wherein a user opening the guide is independent of the broadcast television program; column 10, lines 11-31 and column 2, lines 51-65) and the controller is responsive at any time during receipt of the broadcast digital television data and independently of the broadcast digital television data to output said selected portions (column 10, lines 11-56),

wherein the processor converts the digital audio/video data of the plurality of sets of the broadcast data service data into real time audio/video data (column 3, lines 9-31 and column 10, lines 11-56).

While Klosterman discloses wherein the broadcast data service data is periodically broadcast in a carousel (Figs. 9-10; column 10, lines 32-48) and a memory (Fig. 3; column 5, line 60-column 6, line 37), he fails to specifically disclose extracting and storing all of the current plurality of sets of broadcast data service data in memory and the digital audio/video data being configured in the broadcast signal for reception at a rate slower than an audio/video replay rate for the selected set.

In an analogous art, Marshall discloses a receiving system (Fig. 1) allowing a user to view trailers for selected programming (video clips; column 2, lines 54-61) wherein the trailers are received and extracted from received television signals (column

1, lines 40-52 and column 3, lines 2-6), and stored in memory (column 1, lines 48-52 and column 2, lines 54-61) for the typical benefits of allowing a user to access a trailer on demand without a delay in waiting for it to be transmitted from a programming source (column 1, lines 16-22) and reducing the required transmissions and bandwidth of the trailers.

Additionally, in an analogous art, Picco discloses video distribution system (Fig. 3; column 5, lines 66-67 and column 6, lines 1-16) which will transmit additional content with a digital television signal (Fig. 5; column 8, lines 56-67) wherein the content is transmitted in an alternative protocol to that of the television signal (Fig. 6; column 8, lines 29-36 and column 9, lines 41-51) at a rate slower than the replay rate (Fig. 6; column 8, lines 29-36 and column 9, lines 41-51) and wherein the processor will convert the content into real time content for display (formatting the content for display; column 11, lines 49-54 and column 12, lines 24-30) for the typical benefit of providing a more efficient use of bandwidth by utilizing spare channel bandwidth to download additional content (column 9, lines 10-25).

It would have been obvious to one of ordinary skill in the art at the time of invention by applicant to modify Klosterman's system to include extracting and storing all of the current plurality of sets of broadcast data service data in memory, as taught by Marshall, for the typical benefits of allowing a user to access a trailer on demand without a delay in waiting for it to be transmitted from a programming source and reducing the required transmissions and bandwidth of the trailers.

Additionally, it would have been obvious to one of ordinary skill in the art at the time of invention by applicant to modify Klosterman and Marshall's system to include wherein the digital audio/video data being configured in the broadcast signal for reception at a rate slower than an audio/video replay rate for the selected set, as taught by Picco, for the typical benefit of providing a more efficient use of bandwidth by utilizing spare channel bandwidth to download additional content.

6. Claims 1, 2, 6, 9-11, 13, 25, 31 and 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Klosterman (6,453,471) (of record) in view of Marshall et al. (Marshall) (6,419,137) (of record), Picco et al. (Picco) (6,029,045) (of record) and Connelly (7,284,261).

As to claim 1, Klosterman discloses a system (Fig. 2) for providing a plurality of sets of broadcast data service data (preview trailers; column 2, lines 56-65) transmitted together with broadcast digital television data as part of a broadcast signal (column 2, line 66-column 3, line 8) comprising:

a processor (100) configured to extract the plurality of sets of the broadcast data service data available from a broadcast carousel included in the broadcast signal (column 10, lines 20-48);

the broadcast data service data defining a plurality of audio/video data sets (audio/video data making up the preview trailers; column 10, lines 19-30), the digital audio/video data sets including television clips (column 1, lines 61-67);

a display configured to provide a list of a plurality of sets of the digital audio/video data sets (see Fig 1 and 8; column 10, lines 11-31); and

a controller responsive to a user initiated selection signal provided by an end user (user selection from the guide; column 10, lines 11-31) to cause the output of a user selected one of the plurality of digital audio/video data sets (column 10, lines 11-56) selected from the list (column 10, lines 11-31) simultaneously with continued receipt of the broadcast digital television data (wherein the broadcast television signals continues to be broadcast and received by the system; see Fig. 9-10, column 10, lines 40-56),

the selection signal being provided at any time during receipt of the broadcast digital television data (wherein a television guide may be opened at any time; column 10, lines 11-31 and column 2, lines 51-65) and independently of the broadcast digital television data (wherein a user opening the guide is independent of the broadcast television program; column 10, lines 11-31 and column 2, lines 51-65) and the controller is responsive at any time during receipt of the broadcast digital television data and independently of the broadcast digital television data to output said selected portions (column 10, lines 11-56),

wherein the processor converts the digital audio/video data of the plurality of sets of the broadcast data service data into real time audio/video data (column 3, lines 9-31 and column 10, lines 11-56).

While Klosterman discloses wherein the broadcast data service data is periodically broadcast in a carousel (Figs. 9-10; column 10, lines 32-48) and a memory

(Fig. 3; column 5, line 60-column 6, line 37), the digital television data and at least some of the sets of the plurality of sets of the broadcast data service being transmitted according to a data compression protocol (column 2, line 66-column 3, line 32 and column 10, lines 32-56), he fails to specifically disclose extracting and storing all of the current plurality of sets of broadcast data service data in memory and at least some of the sets of the plurality of sets of the broadcast data service being transmitted according to an alternative compression protocol to that used for the digital television data, the selected one of the broadcast data service data plurality of sets having digital audio/video data in non-real time.

In an analogous art, Marshall discloses a receiving system (Fig. 1) allowing a user to view trailers for selected programming (video clips; column 2, lines 54-61) wherein the trailers are received and extracted from received television signals (column 1, lines 40-52 and column 3, lines 2-6), and stored in memory (column 1, lines 48-52 and column 2, lines 54-61) for the typical benefits of allowing a user to access a trailer on demand without a delay in waiting for it to be transmitted from a programming source (column 1, lines 16-22) and reducing the required transmissions and bandwidth of the trailers.

Additionally, in an analogous art, Picco discloses video distribution system (Fig. 3; column 5, lines 66-67 and column 6, lines 1-16) which will transmit additional content with a digital television signal (Fig. 5; column 8, lines 56-67) wherein the content is transmitted in non-real time (Fig. 6; column 8, lines 29-36 and column 9, lines 41-51) and wherein the processor will convert the content into real time content for display

(formatting the content for display; column 11, lines 49-54 and column 12, lines 24-30) for the typical benefit of providing a more efficient use of bandwidth by utilizing spare channel bandwidth to download additional content (column 9, lines 10-25).

Finally, in an analogous art, Connelly discloses a broadcast television system (Fig. 1; column 2, lines 3-21) wherein the different content items are transmitted in a plurality of different compression formats (column 1, lines 12-16, column 2, lines 26-42 and column 33-47) for the typical benefit of allowing the user to receive and decode content provided by different content providers utilizing different formats (column 1, lines 12-16, column 2, lines 26-42 and column 33-47).

It would have been obvious to one of ordinary skill in the art at the time of invention by applicant to modify Klosterman's system to include extracting and storing all of the current plurality of sets of broadcast data service data in memory, as taught by combination with Marshall, for the typical benefits of allowing a user to access a trailer on demand without a delay in waiting for it to be transmitted from a programming source and reducing the required transmissions and bandwidth of the trailers.

Additionally, it would have been obvious to one of ordinary skill in the art at the time of invention by applicant to modify Klosterman and Marshall's system to include the selected one of the broadcast data service data plurality of sets having digital audio/video data in non-real time, as taught by combination with Picco, for the typical benefit of providing a more efficient use of bandwidth by utilizing spare channel bandwidth to download additional content.

Finally, it would have been obvious to one of ordinary skill in the art at the time of invention by applicant to modify Klosterman, Marshall and Picco's system to include at least some of the sets of the plurality of sets of the broadcast data service being transmitted according to an alternative compression protocol to that used for the digital television data, as taught in combination with Connelly, for the typical benefit of allowing the user to receive and decode content provided by different content providers utilizing different formats.

As to claims 2 and 6, Klosterman, Marshall, Picco and Connelly disclose wherein the digital audio/video data of the plurality of sets of the broadcast data service data is received and stored off-line (wherein the advertisements are stored for later use instead of immediate display; see Marshall at column 1, lines 45-51) and wherein the audio/video data is compressed and wherein the processor decompresses the audio/video data using a predefined protocol. (see Klosterman at column 2, line 66-column 3, line 32 and column 10, lines 32-56).

As to claim 9, Klosterman, Marshall, Picco and Connelly disclose wherein the memory is a semiconductor memory (RAM; see Klosterman at Fig. 3 and Marshall at column 3, lines 2-6).

As to claim 10, Klosterman, Marshall, Picco and Connelly disclose a digital television receiver for providing the broadcast signal to the processor (see Klosterman at column 3, lines 17-22).

As to claim 11, Klosterman, Marshall, Picco and Connelly disclose wherein the system is a single integral unit (see Klosterman at column 3, lines 38-48).

As to claim 13, Klosterman, Marshall, Picco and Connelly disclose wherein the digital television receiver selectively provides digital television data for display (output of tuned television channels; see Klosterman at column 3, lines 17-22 and lines 59-67) and wherein the processor extracts the sets of the plurality of sets of the broadcast data service data irrespective of that display (wherein the downloading and storing of ads is unrelated to the currently displayed video or channel; see Klosterman at column 10, lines 19-56 and Marshall at column 1, lines 40-52).

As to claims 25 and 27, while Klosterman, Marshall, Picco and Connelly disclose wherein the digital television data is converted into real time audio/video data and transmitted in packets (wherein television content arranged and transmitted for real-time receipt and viewing; see Klosterman at column 3, lines 38-67 and lines 1-16), they fail to specifically disclose wherein the digital television data is transmitted in packets generated according to an MPEG standard, such as MPEG2.

The examiner takes official notice that it was notoriously well known in the art at the time of invention by applicant to utilize an MPEG standard, such as MPEG2, to packetize data for transmission and storage for the typical benefits of utilizing a well established standard means for video compression which reduces both the bandwidth and storage needed to handle the data.

It would have been obvious to one of ordinary skill in the art at the time of invention by applicant to modify Klosterman, Marshall, Picco and Connelly's system to include wherein the digital television data is transmitted in packets generated according to an MPEG standard, such as MPEG2, for the typical benefits of utilizing a well established standard means for video compression which reduces both the bandwidth and storage needed to handle the data.

As to claim 31, while Klosterman, Marshall and Picco disclose wherein the digital television data and at least some of the sets of the plurality of sets of the broadcast data service being transmitted according to a data compression protocol (column 2, line 66-column 3, line 32 and column 10, lines 32-56), he fails to specifically disclose at least some of the sets of the plurality of sets of the broadcast data service being transmitted according to an alternative compression protocol to that used for the digital television data.

It would have been obvious to one of ordinary skill in the art at the time of invention by applicant to modify Klosterman, Marshall and Picco's system to include at least some of the sets of the plurality of sets of the broadcast data service being

transmitted according to an alternative compression protocol to that used for the digital television data, as taught in combination with Connelly, for the typical benefit of allowing the user to receive and decode content provided by different content providers utilizing different formats.

In an analogous art, Connelly discloses a broadcast television system (Fig. 1; column 2, lines 3-21) wherein the different content items are transmitted in a plurality of different compression formats (column 1, lines 12-16, column 2, lines 26-42 and column 33-47) for the typical benefit of allowing the user to receive and decode content provided by different content providers utilizing different formats (column 1, lines 12-16, column 2, lines 26-42 and column 33-47).

As to claim 32, Klosterman, Marshall, Picco and Connelly disclose wherein the digital television data is transmitted according to an MPEG standard and at least some of the sets of the plurality of sets of the broadcast data service data being transmitted according to a protocol other than the MPEG standard (see Connelly at column 2, lines 26-42).

7. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Klosterman, Marshall and Picco as applied to claim 2 above, and further in view of Hölzle et al. (Hölzle) (5,970,249) (of record).

As to claim 3, while Klosterman, Marshall, Picco and Connelly, as addressed above, disclose wherein the processor processes the plurality of sets of the broadcast

data service data, they fail to specifically disclose wherein the data is processed at times of low usage.

In an analogous art, Hölzle discloses a computing system (Fig. 5) wherein program compiling is to be performed is delayed (column 4, lines 1-8) until a period of inactivity by the processor (or low usage; column 4, lines 9-23) for the benefit of more efficiently utilizing system resources (column 4, lines 19-23).

It would have been obvious to one of ordinary skill in the art at the time of invention by applicant to modify Klosterman, Marshall, Picco and Connolly's system to include wherein the data is processed at time of low usage, as taught by Hölzle, to provide the common benefit of ensuring that a computer system runs as efficiently as possible.

8. Claims 4 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Klosterman, Marshall, Picco and Connolly as applied to claim 1 above, and further in view of Winston (6,434,653) (of record).

As to claims 4 and 5, while Klosterman, Marshall, Picco and Connolly disclose wherein the processor processes the data, they fail to specifically disclose wherein the processor operates in a batch processing method with data loaded locally from the memory in small chunks.

In an analogous art, Winston discloses a computer system (Fig. 1; 100) containing a processor (101 or 104) with an internal cache (102 or 105; column 3, lines 18-19) wherein data from a local memory (113) is loaded into the caches for processing

(column 3, lines 18-23) for the benefit of providing the processor with faster access to memory (column 3, lines 21-23).

It would have been obvious to one of ordinary skill in the art at the time of invention by applicant to modify Klosterman, Marshall, Picco and Connelly's system to include wherein the processor operates in a batch processing method with data loaded locally from the memory in small chunks, as taught by Winston, for the benefit of providing the processor with faster access to memory by loading data into caches local to the processor.

9. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Klosterman, Marshall, Picco and Connelly as applied to claim 1 above, and further in view of Russo (5,619,247) (of record).

As to claim 7, while the current combination of Klosterman, Marshall, Picco and Connelly disclose wherein the digital audio/video data of the plurality of sets of the broadcast data service data is received and stored off-line (wherein the advertisements are stored for later use instead of immediate display; see Marshall at column 1, lines 45-51) and wherein the audio/video data is compression (see Klosterman at column 2, line 66-column 3, line 32 and column 10, lines 32-56), they fail to specifically disclose wherein the processor decompresses the audio/video data using a downloaded protocol.

In an analogous art, Russo discloses a video distribution system (Fig. 1; column 3, lines 40-64) wherein a proprietary compression algorithm is utilized (column 7, lines

66-67 and column 8, lines 1-6) which is programmable with downloaded signals (column 8, lines 6-10) for the typical benefits for providing additional security (column 8, lines 2-10).

It would have been obvious to one of ordinary skill in the art at the time of invention by applicant to modify Klosterman, Marshall, Picco and Connelly's system to include a downloaded protocol, as taught in combination with Russo, for the typical benefits of providing additional security to distributed contents.

10. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Klosterman, Marshall, Picco and Connelly as applied to claim 1 above, and further in view of Kostreski et al. (Kostreski) (5,729,549) (of record).

As to claim 8, while Klosterman, Marshall, Picco and Connelly discloses wherein the broadcast data service data is received and processed offline (wherein the advertisements are stored for later use instead of immediate display; see Marshall at column 1, lines 45-51), they fail to specifically disclose wherein the processor conducts decryption of the data using a key.

In an analogous art, Kostreski discloses a system for receiving a digital broadcast channel (Fig. 8; column 25, lines 15-22) containing video, audio and data packets (column 25, lines 22-26) wherein the a decryption key is used to decrypt the received packets (column 25, lines 26-35) for the benefit of only allowing access to programming to authorized users (column 25, lines 26-31).

It would have been obvious to one of ordinary skill in the art at the time of invention by applicant to modify Klosterman, Marshall, Picco and Connelly's system to include wherein the processor conducts decryption of the data using a key, as taught by Kostreski, for the benefit of enabling cable providers to protect their programming by preventing access by unauthorized users.

11. Claims 12 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Klosterman, Marshall, Picco and Connelly and further in view of Trovato (6,701,526) (of record).

As to claim 12, while Klosterman, Marshall, Picco and Connelly disclose a memory, they fail to specifically disclose wherein the memory is separate from the digital television receiver and linked by means of a network connection.

In an analogous art, Trovato discloses a cable television receiver (Fig. 2; column 4, lines 29-35) for receiving and extracting data (column 3, lines 66-67 and column 4, lines 1-5) and transmitting the extracted data over an IEEE 1394 connection to an external device (column 10, lines 42-51) for storage (column 10, lines 49-51) for providing the typical benefit of a more flexible system utilizing a portable and modular storage device.

It would have obvious to one of ordinary skill in the art at the time of invention by applicant to modify Klosterman, Marshall, Picco and Connelly's system to include wherein the memory is separate from the digital television receiver and linked by means of a network connection, as taught by Trovato, for the typical benefit of providing a cable

user with a portable and modular storage device with can be easily moved and replaced.

As to claim 24, Klosterman, Marshall, Picco, Connelly and Trovato disclose wherein the network connection is an IEEE 1394 interface (see Trovato at column 10, lines 42-51).

12. Claims 14-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Klosterman, Marshall, Picco and Connelly as applied to claim 1 above, and further in view of Inoue et al. (Inoue) (US2002/0016963A1) (of record).

As to claim 14, while Klosterman, Marshall, Picco and Connelly disclose extracting and storing sets of the plurality of sets, they fail to specifically disclose wherein the controller is configured to identify corresponding extracted and stored sets of the plurality of sets and replaces sets in the memory with respective sets extracted from the broadcast signal.

In an analogous art, Inoue discloses an information receiving apparatus (Fig. 14; 100; paragraph 195) for receiving additional information transmitted with broadcast video (paragraph 75) wherein a controller (input and output control unit, 16) identifies if newly received information is an update of previously stored information (paragraph 200, lines 1-9 and lines 18-40) and replaces the previously stored portions with the newly received update (paragraph 200, lines 27-40) for the typical benefit of ensuring a user has the most up to date information available (paragraph 203).

It would have obvious to one of ordinary skill in the art at the time of invention by applicant to modify Klosterman, Marshall, Picco and Connelly's system to include wherein the controller is configured to identify corresponding extracted and stored sets of the plurality of sets and replaces sets in the memory with respective sets extracted from the broadcast signal, as taught by Inoue, for the common benefit of providing the most recent broadcast data available to cable television viewers.

As to claim 15, Klosterman, Marshall and Inoue disclose wherein, if periodically the broadcast signal includes all of the plurality of sets of the broadcast data service (see Inoue at paragraph 202, lines 1-5), the controller can store all of the received plurality of sets in the memory (see Inoue at paragraph 202, lines 1-5).

As to claim 16, Klosterman, Marshall and Inoue disclose wherein the controller accesses an additional data channel to obtain and store in the memory all of the sets of the plurality of sets of the broadcast data service (wherein the trailer signals may be transmitted with the broadcast programming or in a separate data stream; see Klosterman at Fig. 9 and 10, column 2, line 66-column 3, line 16 and column 10, lines 32-48).

Conclusion

13. The following are suggested formats for either a Certificate of Mailing or Certificate of Transmission under 37 CFR 1.8(a). The certification may be included with all correspondence concerning this application or proceeding to establish a date of mailing or transmission under 37 CFR 1.8(a). Proper use of this procedure will result in

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such communication being considered as timely if the established date is within the required period for reply. The Certificate should be signed by the individual actually depositing or transmitting the correspondence or by an individual who, upon information and belief, expects the correspondence to be mailed or transmitted in the normal course of business by another no later than the date indicated.

Certificate of Mailing

I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to:

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14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to JAMES SHELEHEDA whose telephone number is (571)272-7357. The examiner can normally be reached on Monday - Friday, 9:00AM - 5:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chris Kelley can be reached on (571) 272-7331. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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/James Sheleheda/
Examiner, Art Unit 2623

JS